



EXPRESS MAIL NO. EL 755725017US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Christen M. Anderson et al.
Application No. : 09/811,132
Filed : March 14, 2001
For : PRODUCTION OF ADENINE NUCLEOTIDE TRANSLOCATOR (ANT),
NOVEL ANT LIGANDS AND SCREENING ASSAYS THEREFOR

Art Unit : 1653
Docket No. : 660088.420D5
Date : May 30, 2001

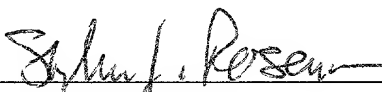
Commissioner for Patents
Washington, DC 20231

FILING FORMAL DRAWINGS

Commissioner for Patents:

In response to the Notice to File Corrected Application Papers dated May 11, 2001,
enclosed are 14 sheets of formal drawings, Figures 1A-19, for filing in the above-identified application.

Respectfully submitted,
Christen M. Anderson et al.
Seed Intellectual Property Law Group PLLC



Stephen J. Rosenman, Ph.D.
Registration No. 43,058

SJR:kw

Enclosures:

Formal Drawings (14 sheets, Figs. 1A-19)

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ANT1m ATGGGTGATCACGCTTGGAGCTTCTAAAGGACTTCCTGGCCGGGGCGGTGCGCGGTGCCGTCTCCAAGACGGCGGTCCG 80
 ANT2m ATGACAGATGCGCTGTGTCTTCGCCAAGGACTTCCTGGCAGGTGGAGTGGCCGAGCCATCTCCAAGACGGCGGTAGC 80
 ANT3m ATGACGGATCAGGCGATCTCTTCGCCAAGGACTTCCTGGCCGAGGCAATCGCCGCGCCATCTCCAAGACGGCGGTGCC 80

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 ANT2m CCCCATCGAGCGGGTCAAGCTGCTGCTGCAGGTCCAGCATGCCAGCAAGCAGATCACTGCAGATAAGCAATACAAAGGCA 160
 ANT3m TCCGATCGAGCGGGTCAAGCTGCTGCTGCAGGTCCAGCAAGCCAGCAAGCAGATCGCCGCGCAAGCAGTACAAAGGCA 160

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 ANT2m TTATAGACTGCGTGGTCCGTATTTCCCAAGGAGCAGGAAGTTCTGTCTCTTGCGCGGTAACTGGCCAATGTCACTACA 240
 ANT3m TCGTGGACTGCAATTTGCCGATCCCAAGGAGCAGGGCGTCTGTCTCTTGAGGGGTAACTTTGCCAACGTCAATTCG 240

ANT1m TACTTCCCCACCAAGCTCTCAACTTCGCCTTCAAGGACAAGTACAAGCAGCTCTCTTTAGGGGGTGTGGATCGGCATTA 320
 ANT2m TACTTCCCCACCAAGCTCTTAACTTCGCCTTCAAGATAATACAAGCAGATCTTCTGGGTGGTGTGGACAAGAGAAC 320
 ANT3m TACTTCCCCAATCAAGGCTCAACTTCGCCTTCAAGGATAAGTACAAGCAGATCTTCTGGGGGGGTGGACAAGCAC 320

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 ANT2m CCAGTTTGGCTTACTTTGCAAGGAATCTGGCATCGGTGGTGGCGAGGGGCCAATCCCTGTGTTTGTGTACCCGC 400
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 ANT2m TTGATTTTGCCTTACCCGCTTAGCAGCTGATGTGGGTAAGCTGGAGCTGAAGCGAATCCGAGGCCTGGTGACTGC 480
 ANT3m TGGATTTTGCAGAACCCGCTGGCAGCGAGCTGGGAAGTTAGGCAACAGAGCGGAGTTCCGAGGCCTGGGAGACTGC 480

Fig. 1A

ANT1m ATCATCAAGATCTTCAAGTCTGATGGCTTGAAGGGGCTTACCAGGGTTTCAACGTCTCTGTCCAAGGCATCATATCTA 557
 ANT2m CTGGTTAAGATCTACAAATCTGATGGATTAAAGGCCTGTACCAAGGCTTTAACGTCTCTGTGCAGGGTATATCATCTA 560
 ANT3m CTGGTGAAGATCAACAAGTCCAGCGGCATCCGGGGCTGTACCAGGGCTTCAAGTCTCCGTGCAGGGCATCATCATCTA 560

ANT1m TAGAGCTGCCTACTTCGGAGTCTATGATACTGCCAAGGGATGCTTCCCTGACCCCAAGAAGCTGCACATTTTGTGAGCT 637
 ANT2m CCGAGCCGCTACTTCGGTATCTATGACTGCAAGGGAATGCTTCCGATCCCAAGAACAATCACATCGTCATCAGCT 640
 ANT3m CCGGGGCGCTACTTCGGGTGTACGATAAGCCAAGGGATGCTTCCCGACCCCAAGAACACGCACATCGTGGTGAGCT 640

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 ANT2m GGATGATCGACAGACTGTCACTGTGTGTGCCGGTGTGACTTCCATCCATTTGACACTGTTCCCGCCGCATGATGATG 720
 ANT3m GGATGATCGGCAGACGTGACGGCGTGGCCGGCTGTGTCTACCCCTTGACACGGTGGCGGCGCATGATGATG 720

ANT1m CAGTCCGGCCGAAAGGGGCGATATATGTACACGGGACAGTTGACTGCTGGAGGAAGATTGCAAGAGCAAGGAGC 797
 ANT2m CAGTCAAGGCGCAAAGGAATCTGACATCATGTACACAGGCACGCTTGACTGCTGGGGAAGATTGCTGTGATGAAGGAGG 800
 ANT3m CAGTCCGGGCGCAAAGGAGCTGACATCATGTACACGGGCACGCTGACTGTGGAGGAAGATCTTAGAGATGAGGGGG 800

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 ANT2m CAAGCTTTTCAAGGGTGCATGGTCCAATGTCTGAGAGGCATGGGTGGTCTTTTGTCTTGTCTTGTATGATGAAA 880
 ANT3m CAAGGCCTTCTTCAAGGGTGGTGGTCCAATGTCTGCGGGCATGGGGGGCGCTTCTGTCTGGTCTGTACAGAGAGC 880

ANT1m TCAAAATATGTCTAA 894
 ANT2m TCAAGAAGTACATAA 897
 ANT3m TCAAGAAGTGATCTAA 897

Fig. 1B

HANT1p	MDHAWSF[KDFLAGVAAAVSKTAVAPIERVKLLLVQHASKQISAEKQ	50
HANT2p	MTDAVVSFAKDFLAGGVAAAIKTAVAPIERVKLLLVQHASKQITADKQ	50
HANT3p	MTEQALISFAKDFLAGGTAAAIKTAVAPIERVKLLLVQHASKQITADKQ	50
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HANT2p	YKGIIDCVVRIPKEQGLSFWRGNLNVIRYFPTQALNFAFKDKYKQIFL	100
HANT3p	YKGIIDCVVRIPKEQGLSFWRGNLNVIRYFPTQALNFAFKDKYKQIFL	100
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HANT2p	GGVDKHTQFWRYFAGNLASGGAAGATSLCFVYPLDFARTRLAADVGRRA	150
HANT3p	GGVDKHTQFWRYFAGNLASGGAAGATSLCFVYPLDFARTRLAADVGRRA	150
HANT1p	EREFRGLGDCLVKIKSDGIRGLYQGFNVSVQGIIYRAAYFGVYDTAKG	199
HANT2p	EREFRGLGDCLVKIKSDGIRGLYQGFNVSVQGIIYRAAYFGVYDTAKG	200
HANT3p	EREFRGLGDCLVKIKSDGIRGLYQGFNVSVQGIIYRAAYFGVYDTAKG	200
HANT1p	MLPDPKNTHIVVSWMIAQVTAVAGLVSYPFDTVRRRMMQSGRKGADIM	249
HANT2p	MLPDPKNTHIVVSWMIAQVTAVAGLVSYPFDTVRRRMMQSGRKGADIM	250
HANT3p	MLPDPKNTHIVVSWMIAQVTAVAGLVSYPFDTVRRRMMQSGRKGADIM	250
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HANT2p	YTGTDCWRKIAERDEGGKAFFKGAWSNVLRGMGGAFVLVLYDEIKKYT	299
HANT3p	YTGTDCWRKIAERDEGGKAFFKGAWSNVLRGMGGAFVLVLYDEIKKYI	299

Fig. 2

Title: PRODUCTION OF ADENINE NUCLEOTIDE TRANSLOCATOR (ANT), NOVEL ANT LIGANDS AND SCREENING ASSAYS THEREFOR

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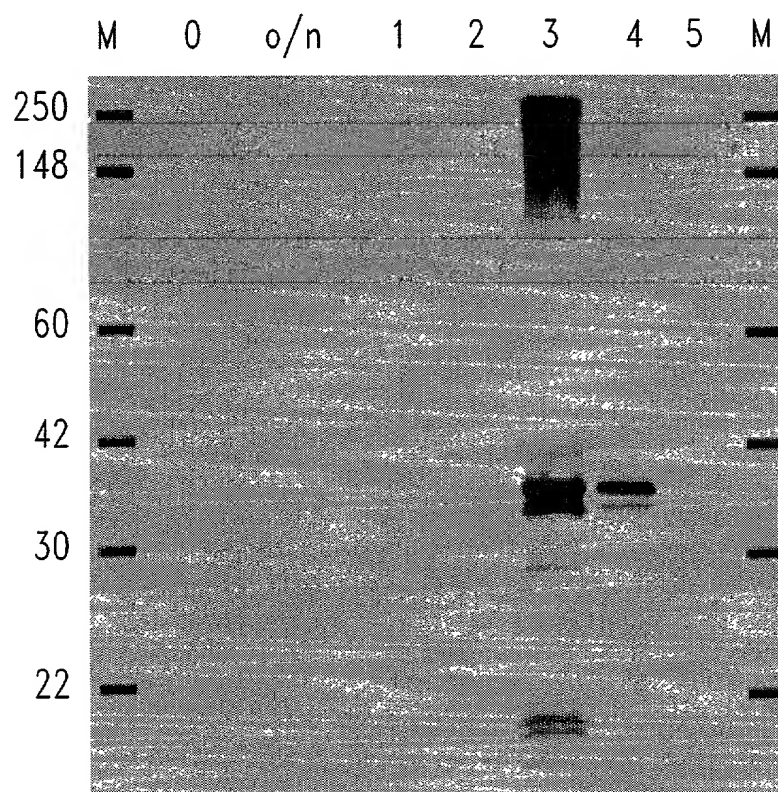


Fig. 3

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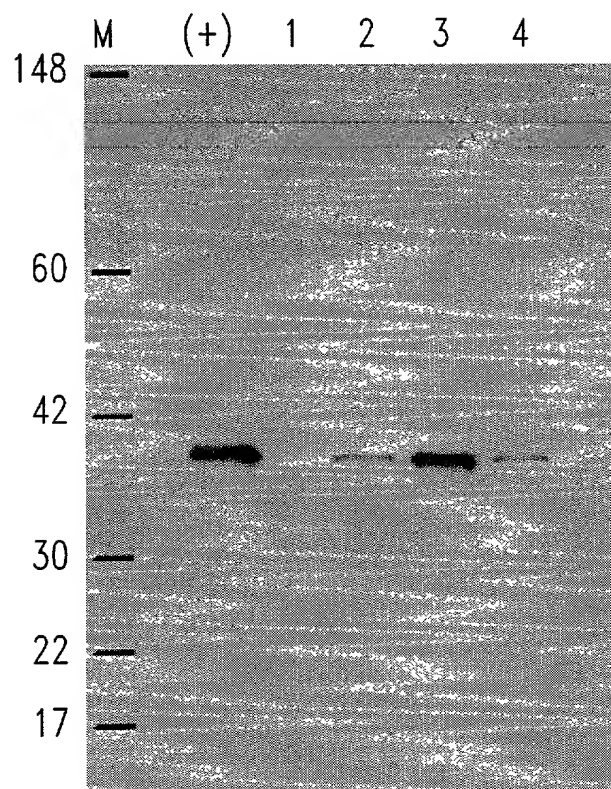


Fig. 4

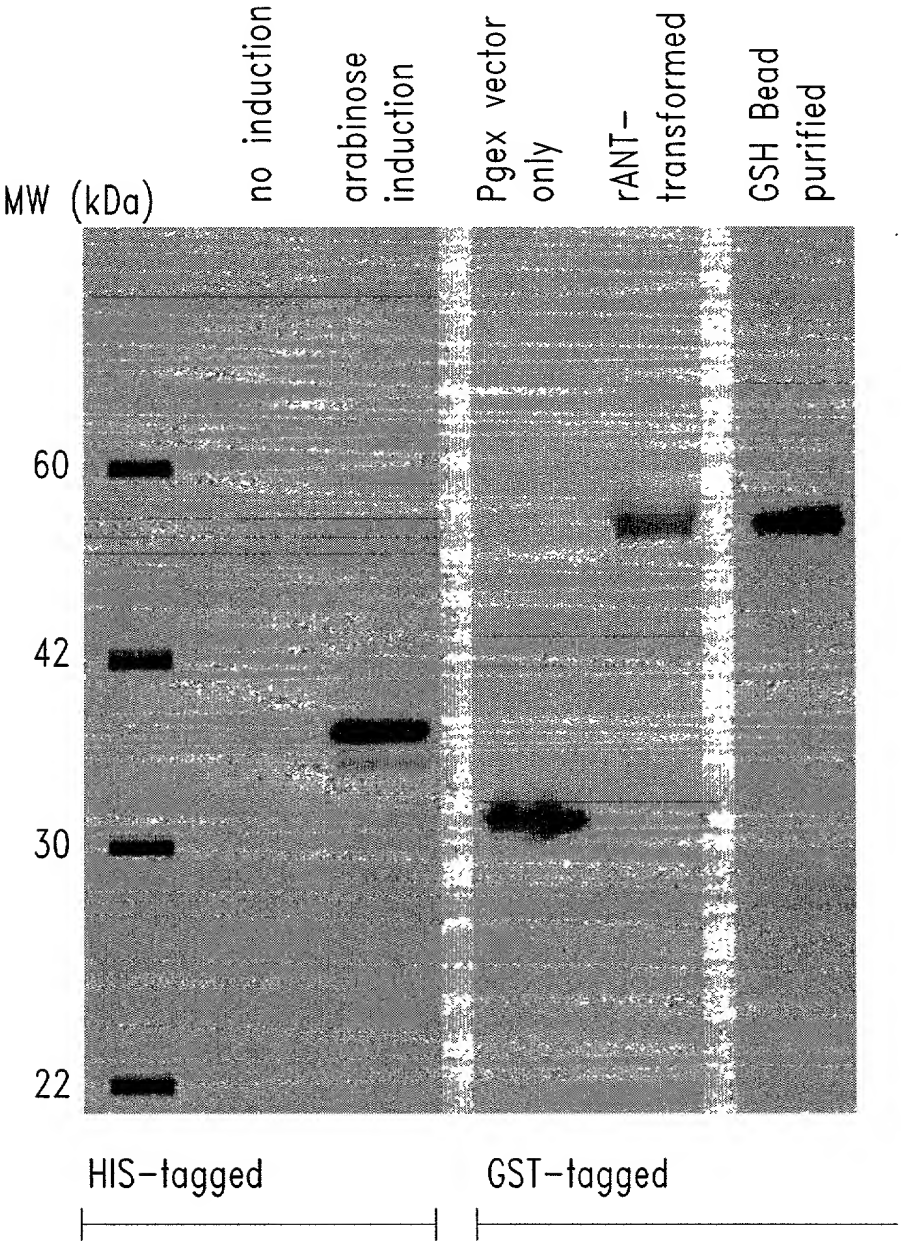


Fig. 5

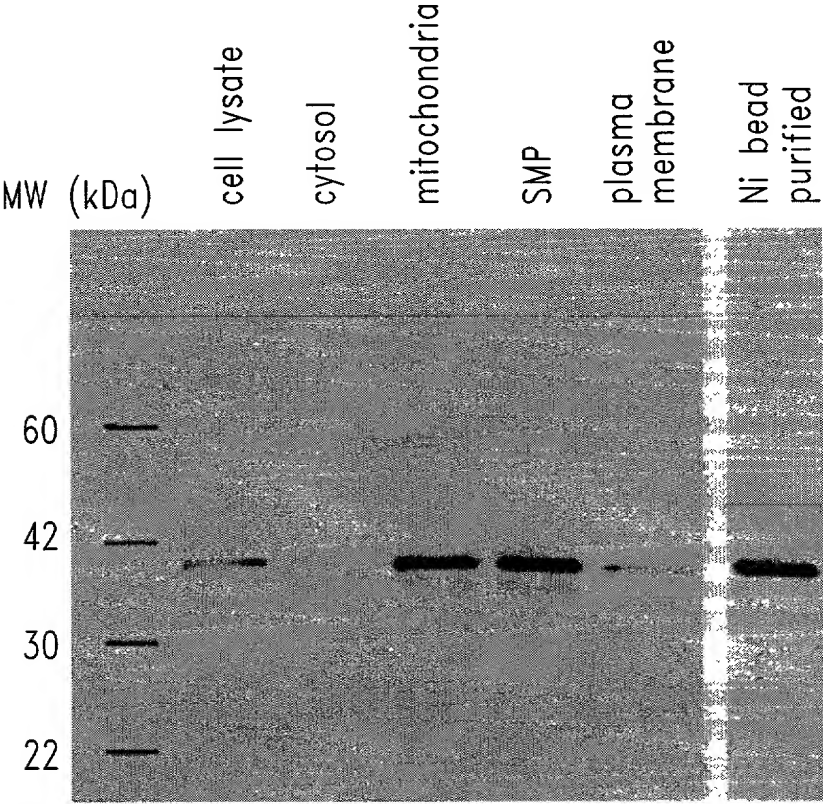


Fig. 6

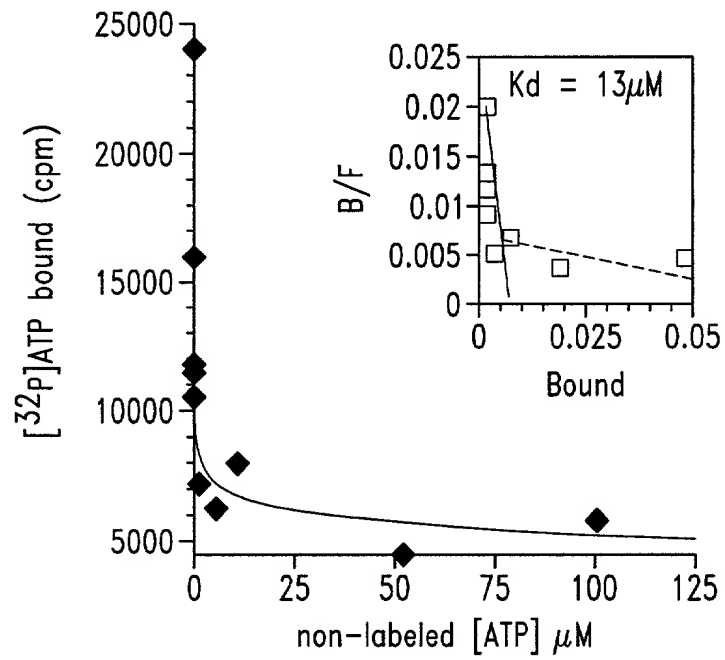


Fig. 7

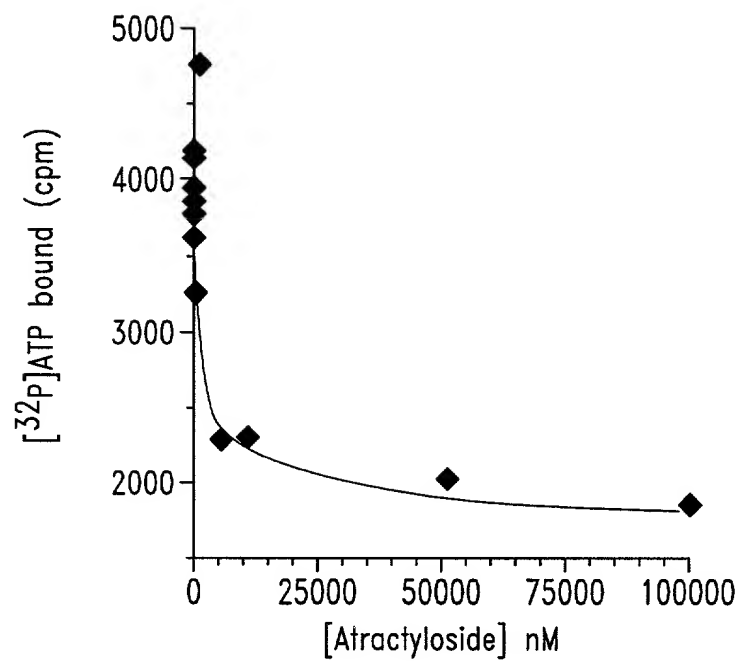


Fig. 8

Title: PRODUCTION OF ADENINE NUCLEOTIDE TRANSLOCATOR (ANT), NOVEL ANT LIGANDS AND SCREENING ASSAYS THEREFOR

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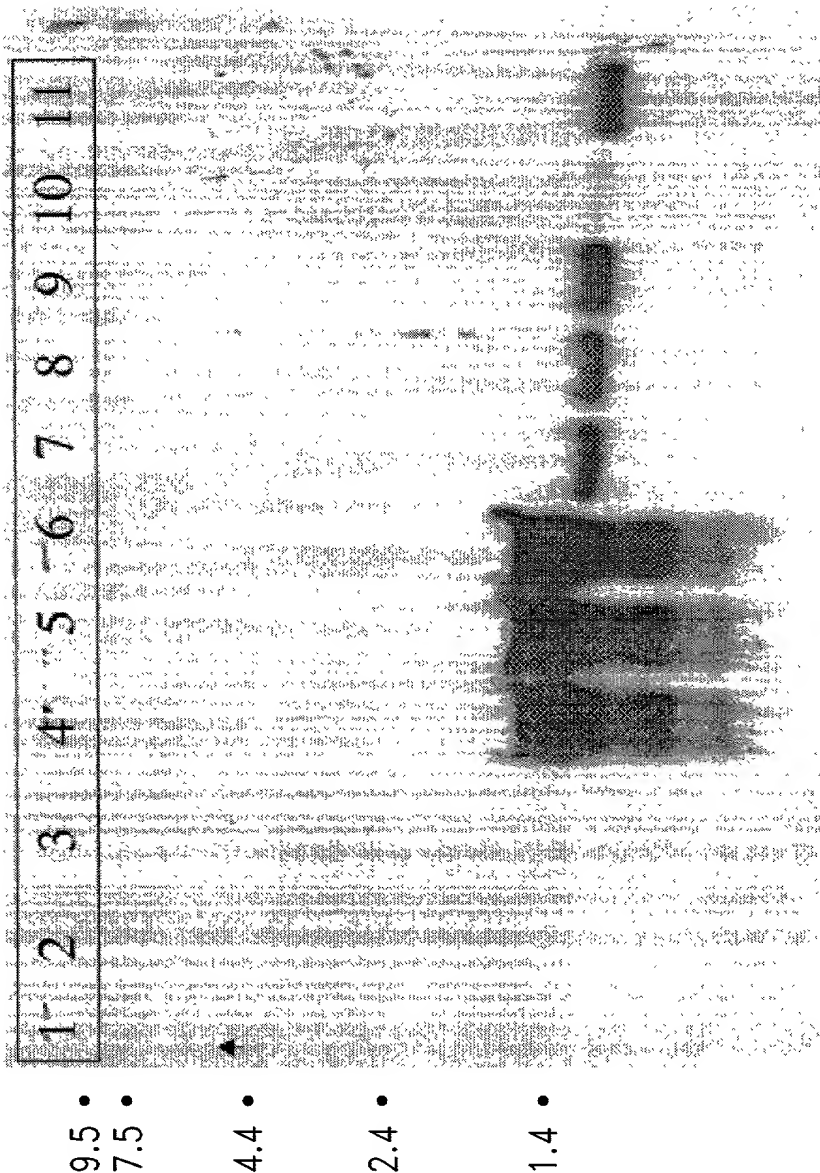


Fig. 10

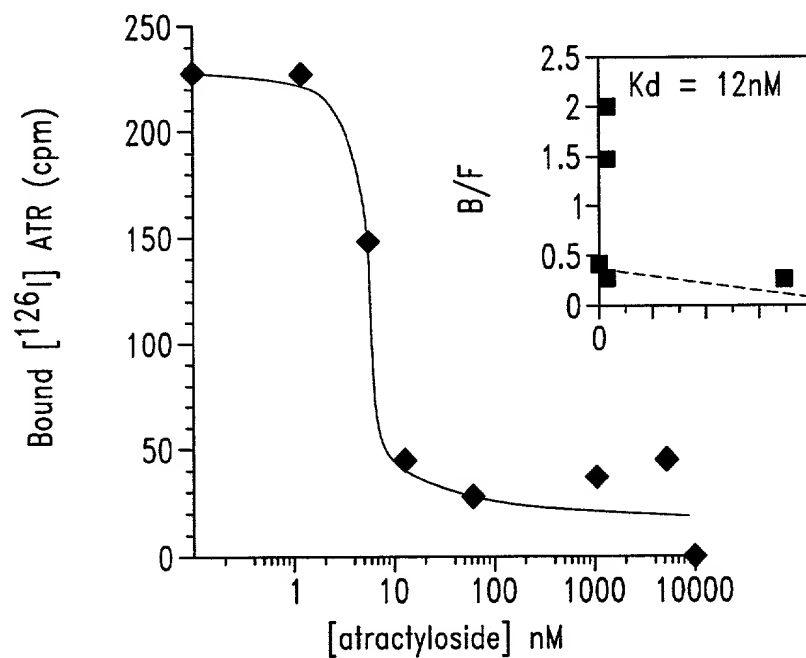


Fig. 9

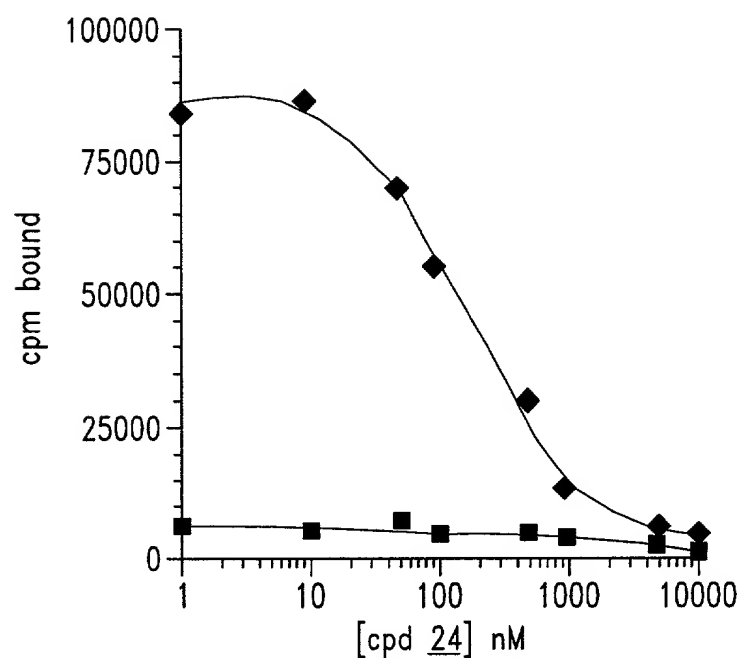


Fig. 11

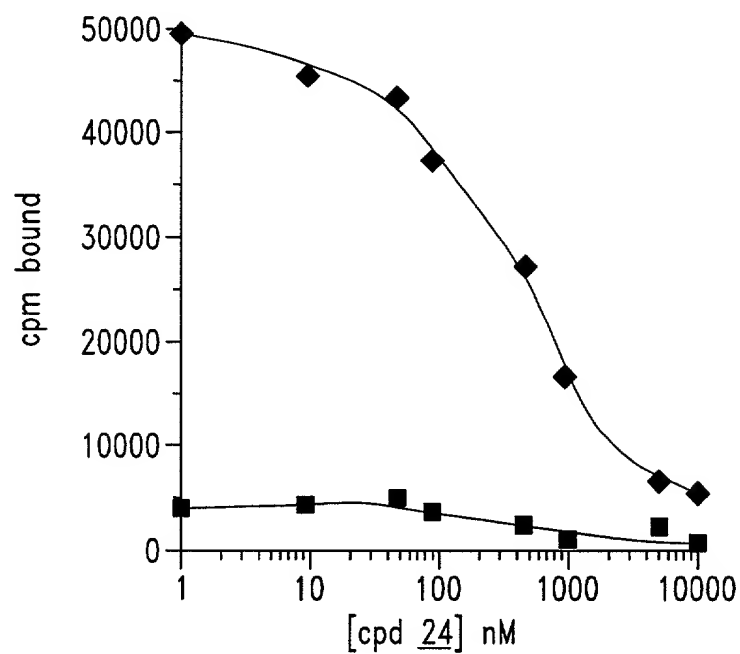


Fig. 12

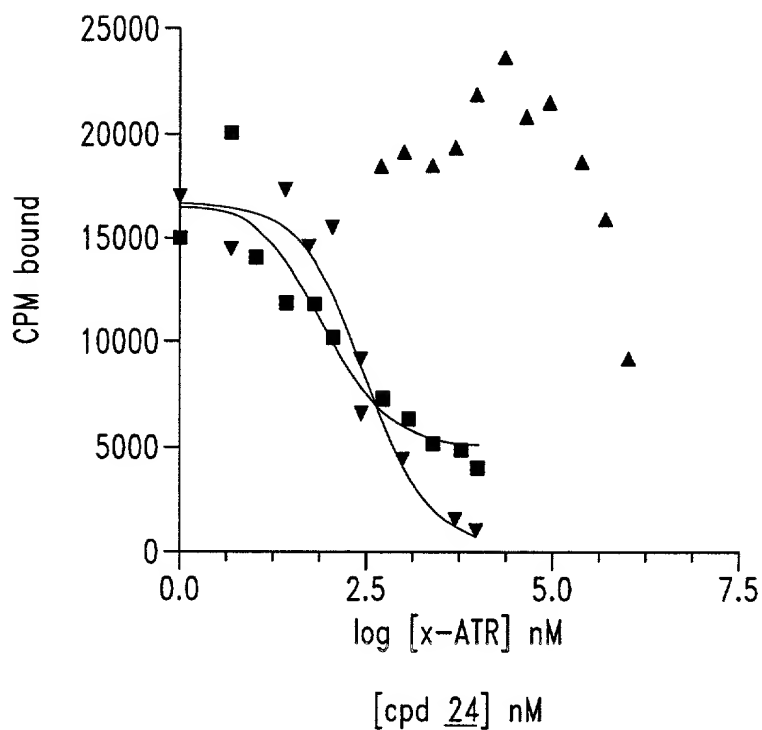


Fig. 13

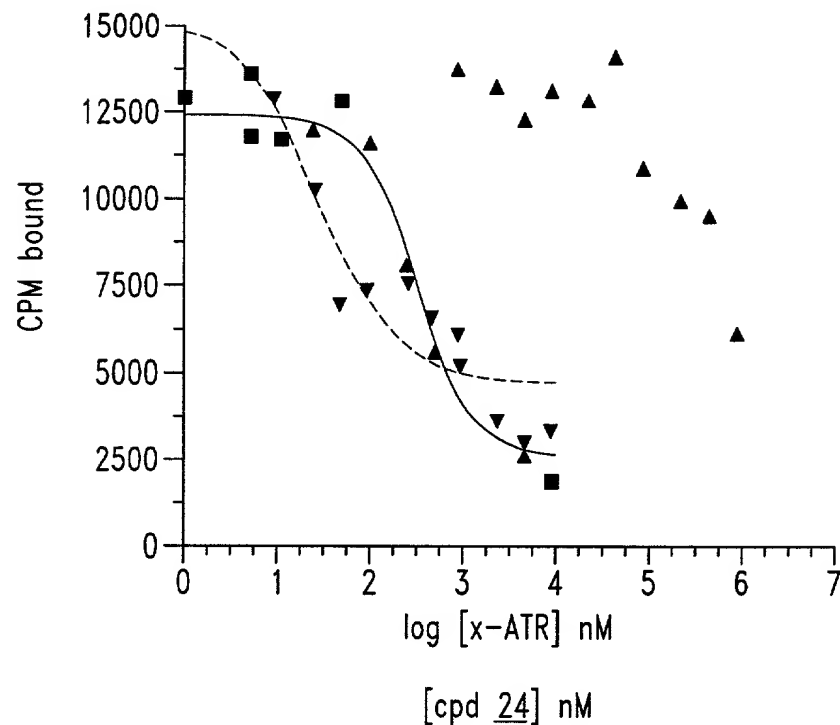


Fig. 14

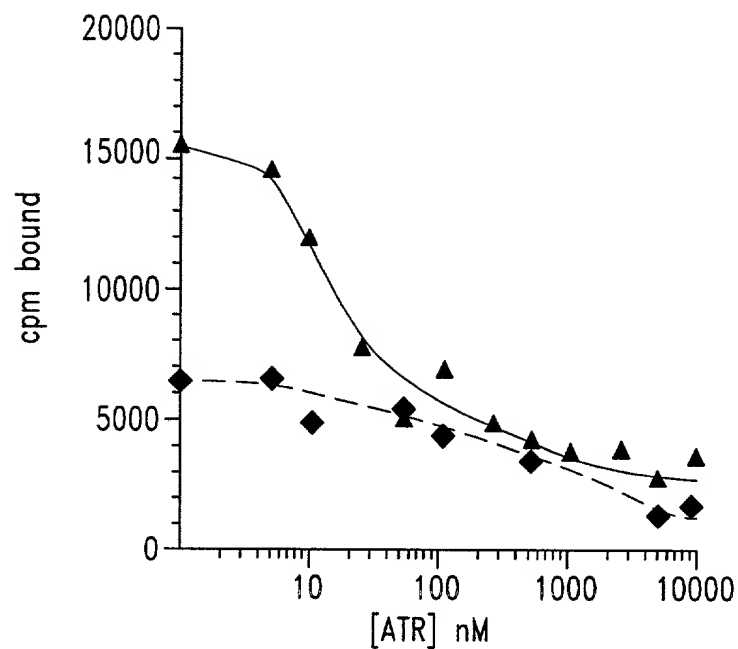


Fig. 15

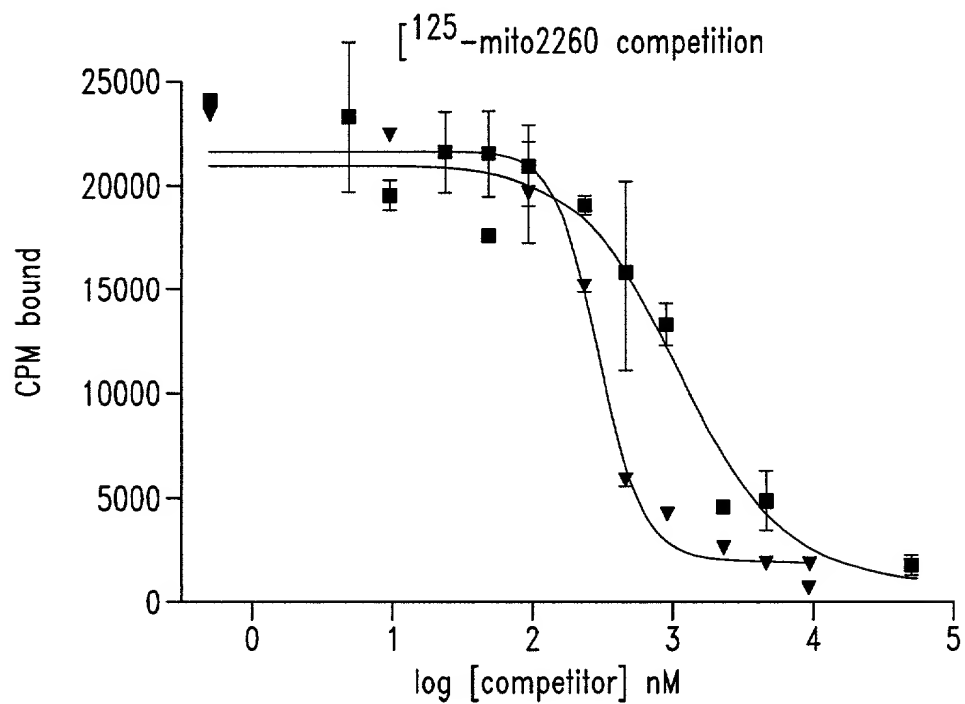


Fig. 16

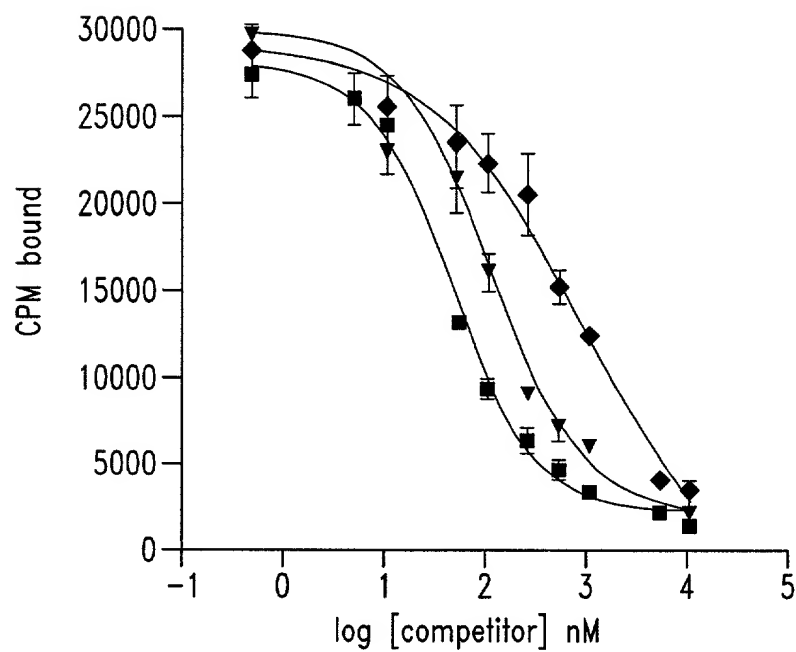


Fig. 17

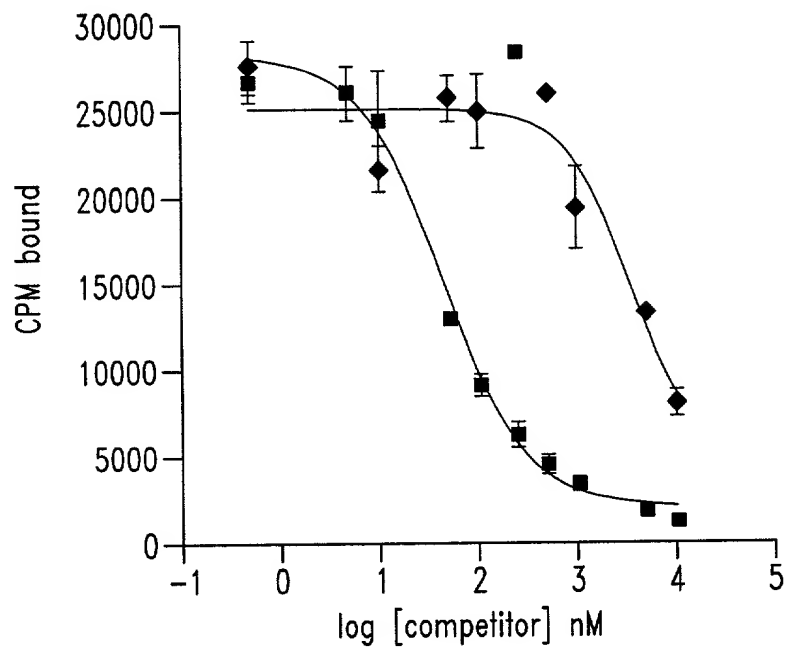


Fig. 18

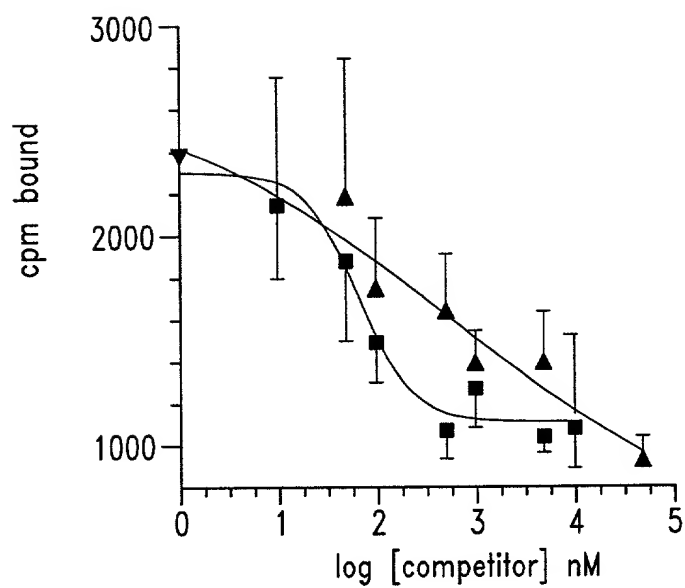


Fig. 19